In the Specification:

Please amend paragraphs [0013], [0029], [0040] and [0046] as follows:

[0013] A further advantage of a preferred embodiment of the present invention is that layers of the scheduling hierarchy that can be modified to support future modifications to the digital communications system can be placed in software, which can readily be ~~modified. While~~ modified, while layers needing rapid performance but not much flexibility can be placed in firmware.

[0029] The process for providing QoS to a certain message flow may be as follows. A request for a certain amount of network resources is initially passed to a QoS enabled resource management entity (not shown) of a layer (from the upper layer 205). Upon receipt of the request, the resource management entity can decide whether to accept or reject the resource request. This decision making process (referred to as an admission control process) can be performed in an entity commonly referred to as an admission control entity (ACE) 215. In order to perform the decision, the ACE 215 may need to monitor the current load on the network and to predict the future requirements. A load monitor 220 may be used to monitor current network load. Additionally, during the admission control process, the ACE 215 may need to negotiate with other ACEs (located in the lower layer 210 or in other networks (not shown)) via a pre-defined signaling protocol. ~~Should~~ If the specified requirements cannot be satisfied by all of the parties in a path (between a source of the message flow to a destination of the message flow), the ACE 215 may either require the upper layer 205 to reduce the requirements of its request or reject the request altogether.

[0040] The hierarchical scheduling system 400 can be partitioned into two parts, a host scheduling part 405 and a firmware scheduling part 450. The host scheduling part 405 can be implemented on the electronic device 355 coupled to the station 305. The firmware scheduling part 450 can be implemented in embedded firmware (such as the embedded firmware 315) of the

station 305. The host scheduling part 405 can be used to schedule traffic types (such as real-time, streaming, premium data, best effort, and so on) and create a prioritized queue for messages in the various traffic types. Each traffic type can have varying bandwidth demands along with different traffic characteristics. For example, real-time traffic (such as voice) typically requires low delay with low jitter and can be characterized as either a constant bit rate or variable bit rate with relatively low bandwidth requirements. Streaming traffic (such as video), on the other hand, requires medium delay with medium jitter with relatively high bandwidth requirements with a minimum guaranteed bandwidth to prevent buffer under-run. Premium data traffic (such as premium web browsing, FTP, email) has medium delay and jitter requirements with traffic that has a minimum required bandwidth to ensure satisfactory ~~performance. While~~ performance, while best effort traffic (such as web browsing, FTP, email) typically has no minimum bandwidth requirements but has traffic that can be characterized as being bursty.

[0046] With the packets at the heads of each priority queue (at least the priority queues with messages queued) and the remaining token, the priority queue scheduler 430 selects the next packet to be provided to the ~~host~~ firmware scheduling part 450. As discussed previously, the priority queue scheduler 430 may select the next packet to be provided based upon many factors, such as the packet's priority, packet wait times, information from the bandwidth policer 510, and so on. After selecting the next packet to provide to the ~~host~~ firmware scheduling part 450, the priority queue scheduler 430 can provide a description of the selected packet to a shared memory 515. This effectively transfers the selected packet to the ~~host~~ firmware scheduling part 450. Alternatively, the priority queue scheduler 430 may provide the selected packet to the shared memory 515. The priority queue scheduler 430 can also provide information about the selected packet to the bandwidth policer 510, which can use the information to update its token.